Project Baseline Summary Report

Data Source: **EM CDB** Report Number: **GEN-01b**

Operations/Field Office: **Idaho** Print Date: **3/10/2000**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory** HQ ID: **0177**

Project **ID-SNF-103 / Emptied SNF Facilities**

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

PURPOSE: This scope of work is contained within the INEEL PBS for the Spent Nuclear Fuel (SNF) Program, PBS # ID-SNF-103, entitled Emptied SNF Facilities, WBS # C.1.04.02. Within this PBS are the eight projects described below.

(1) W.1.04.02.01 CPP-603 Emptied of SNF.
(2) C.1.04.02.02 CPP-666 Emptied of SNF.
(3) C.1.04.02.03 TAN Emptied of SNF.
(4) C.1.04.02.04 Fort St. Vrain (FSV)Emptied of SNF.
(5) C.1.04.02.05 CPP-749 Emptied of SNF.
(6) C.1.04.02.06 Irradiated Fuel Storage Facility (IFSF) Emptied of SNF.
(7) C.1.04.02.07 CPP-1774 Emptied of SNF.
(8) C.1.04.02.08 INTEC Dry Transfer Facility and Dry Storage Facility (DTF/DSF)Emptied of SNF.

These projects account for the:

(a) Maintenance of the facilities listed;
(b) Receipt and storage of SNF into the facility;
(c) Safe management of the SNF within the facility; and
(d) Transferral out of the SNF at life's end for that facility.

The INEEL's SNF management strategy consists of four main objectives:

(1) Perform national responsibilities - receive domestic and foreign research reactor SNF until program closure;
(2) Address vulnerabilities - place wet stored SNF into secure dry facilities by 12/31/2023;
(3) Consolidate SNF storage areas - bring all SNF into a single management area; and
(4) Remove all SNF from the INEEL and the State of Idaho by 01/01/2035.

Definition of Scope: Specific work to be accomplished by PBS #ID-SNF-103 includes:
1. Facility and equipment maintenance to ensure safety and environmental compliance.
2. Fuel monitoring activities such as fuel inventories, inspections, corrosion monitoring, etc.
3. Receipt of scheduled Naval and DOE-owned fuels
4. Receipt of scheduled domestic research reactor (DRR) SNF. 5. Receipt of foreign research reactor (FRR) SNF. 6. Transfer of all fuels in underwater basin storage to dry storage, thereby resolving the vulnerabilities associated with wet storage. 7. Specific treatment of certain SNF types to render the fuel acceptable for the repository. This includes treatment at INEEL, including ANL-W, and transfers of certain fuels to SRS per the EIS Record of Decision. 8. Preparations for transfer of the SNF and SNM out of Idaho and Colorado (including engineering design, fabrication of special tools, preparation of documentation and procedures, operator training to move specific fuels, repackaging SNF as necessary, Readiness Assessments, etc.) 9. SNF and SNM transfers.
All of these activities are in direct support of the Idaho State Settlement Agreement.

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Technical Approach: The ID-SNF-103 Project technical approach to dealing with SNF and SNM storage and disposition is to use systems engineering to resolve vulnerabilities and develop a path forward. This will ensure that decisions are based on a thorough analysis of the various alternatives and factors related to existing SNF storage facilities as well as the two new dry storage facilities, the CPP-1774 (DOE) Dry Storage Facility and the yet-to-be-built Privatized DTF/DSF that will be brought on line in the near future. (The DTF/DSF is being constructed under PBS #ID-SNF-105 and the capital costs are included in that PBS. Only the operations costs after startup of operations are included here.) It also indudes evaluation of treatment alternatives for those fuel types that will not meet repository acceptance criteria. Once all storage areas have been emptied of SNF, they will be turned over to the Deactivation program.

Project Status in FY 2006:

Project Status for the various facilities in FY 2006 will be as follows:
(1) CPP-603 - All SNF currently stored in the CPP-603 Basins will be removed to safer wet storage or dry storage at Idaho Nuclear Technology and Engineering Center (INTEC), formerly the Idaho Chemical Processing Plant(ICPP), by December 31, 2000. The facility will then be turned over to the Deactivation Program. (2) CPP-666 - DOE-owned Fermi Fuel and Sodium (Na) Bonded Fuel currently stored in the CPP-666 basins will be removed to either the IFSF or a treatment facility by the end of FY 2004. All other DOE-owned fuel at CPP-666 will be in the process of being transferred to the IFSF. The Navy fuel currently stored at CPP-666 will be in the process of being shipped back to the Naval Reactors Facility (NRF). (3)TAN will have completed the transfer of the TMI-2, and LOFT/commercial SNF to CPP-1774 or other dry storage, and will have received the West Valley SNF and placed it into dry storage for surveillance and monitoring. The TAN-607 pool area will have been turned over to the Deactivation Program in FY-2003. (4) Fort St. Vrain will continue to perform surveillance and monitoring of the dry stored SNF in its independent spent fuel storage installation (ISFSI). (5) CPP-749 - All SNF and SNM at CPP-749 will be in the process of being shipped to either the DTF/DSF, Oak Ridge National Laboratory, or a treatment facility. (6)IFSF - Operation will be ongoing. The IFSF is scheduled to be receiving SNF from domestic and foreign sources as well as SNF from on-site, repackaging compromised SNF, and shipping SNF to the DTF/DSF. (7) CPP-1774 Dry Storage Facility - Operation will be ongoing. This facility will have received all SNF for dry storage from the TAN-607 pool by FY-2002. (8) DTF/DSF - This facility will be in operation by a Privatized vendor, receiving SNF from IFSF and CPP-749, repackaging the SNF into standard canisters and placing it into NRC-licensed interim dry storage at INTEC.

Post-2006 Project Scope:

Following FY 2006, SNF will continue to be removed from underwater storage to either existing or new, NRC licensed dry storage. Once all the fuel is removed from a facility, it is turned over to the Deactivation program. (1) CPP-666 will be shipping DOE-owned fuel to IFSF and Navy-owned fuel back to the Naval Reactors Facility through FY 2011. (2) TAN will perform surveillance and monitoring of its dry stored SNF until it is repackaged and shipped directly to the repository in FY-2017. TAN will be turned over to the Deactivation Program in FY-2018. (3) Fort St. Vrain will perform surveillance and monitoring on the SNF stored in its ISFSI until FY-2024 when the transfer of this SNF to the INEEL will start. The SNF will be repackaged at the DTF/DSF and then sent directly to the repository. This work will complete in FY-2027. Fort St. Vrain will be turned over to the Deactivation Program in FY-2028. (4) CPP-749 will be transferring SNF and SNM to various destinations (on and off-site) through FY 2010. It will then be turned over to the Deactivation Program in FY-2011. (5) IFSF will be receiving SNF from domestic, foreign, and on-site sources and also transferring SNF to the DTF/DSF; IFSF will remain in operation until FY-2034. IFSF will be turned over to the Deactivation Program in FY-2035. (6) CPP-1774 Dry Storage Facility will continue storing SNF until it is sent to the DTF/DSF for repackaging in standardized canisters and transferred to the repository during the period of FY-2030 to FY-2033. (7) Operation of the DTF/DSF will continue through FY-2035. Fuel from IFSF, CPP-1774

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and FSV in Colorado will be processed through the DTF and placed into NRC-licensed interim storage or direct transferred to the repository. Expansions to the DTF and Dry Storage will be completed in FY-2009 allowing SNF to be treated (as necessary), packaged in standardized canisters and stored or transferred to the repository. All SNF on-site and at FSV, with the exception of the fuel on the TAN Pad, will be transferred through this facility in route to the repository. All fuel will be removed by the State Settlement Agreement date of January 1, 2035.

Project End State

- All SNF/SNM storage facilities will be emptied of SNF and SNM. All DOE-owned fuel will be shipped in a stable condition to the repository. It is expected that sodium-bearing fuel will be sent to a treatment facility prior to being sent to the repository. SNM will be removed prior to 2006. After the SNF and SNM is removed, the facilities will be turned over to the Deactivation/Decontamination Project.

Cost Baseline Comments:

Current estimated costs have been developed using the INEEL lifecycle planning package (LCPP) process. Lifecycle planning packages have been prepared for all current projects. Cost estimates have been prepared using parametrics and actuals adjusted for complexity and other factors. Validation and DOE-ID approval has occurred for all projects in this PBS except for a portion of TAN, CPP-1774 and the DTF/DSF. Assumptions have been incorporated into the LCPPs to reflect current plans and strategies. These changes are reflected in the current estimates. The activities identified in this PBS are required to meet the INEEL compliance baseline (e.g., as detailed in the State Settlement Agreement for SNF). Major assumptions that affect the cost estimate for this project are: 1) Personnel and equipment are available and infrastructure support is available; 2) The Settlement Agreements with the States of Idaho and Colorado are not changed or renegotiated; 3) Routine surveillance is required to ensure compliance with applicable laws, acts, regulations, Technical Safety Requirements, industrial safety and Conduct of Operations requirements; 4) Existing structures and equipment must be maintained in operable condition to facilitate fuel storage and fuel relocation activities; and 5) A treatment facility will be ready to receive sodium-bonded fuel when this PBS is ready to ship it. The life cycle planning documents reflect an unescalated total of $1,389,178. IDMS differences are attributed to rounding calculations.

Safety & Health Hazards:

The risks associated with this PBS are related to wet storage of SNF and fuel movements. The current authorization basis for this PBS is governed by the INTEC Safety Document, Section 4.0 and the associated Technical Safety Requirements; the FSV ISFSI SAR 72-9; and the CPP-1774 (DOE) Dry Storage ISFSI. Specifically, wet storage increases risks to workers and the environment through potential radiological contamination and continued corrosion and degradation of SNF, which could result in an uncontrolled underwater criticality in a worst case scenario. Fuel movements also increase risks of radiological contamination and industrial safety hazards to workers.

This PBS is currently in the SNF/SNM storage and transfer phase and contains the S&H functions necessary to maintain a safe, compliant and operable workplace in compliance with the authorization basis, surveillances, compensatory measures, and maintenance and calibration of vital safety systems. The principle hazards in the seven existing storage facilities (one is still in the planning stage) are the large quantities of SNF (and smaller quantity of SNM), most of which are in the process of being stabilized or prepared for long term storage.

Wet Storage - The environmental, safety and health (ES&H) risks associated with underwater basin storage are significant as identified in the DOE-EH Vulnerability Report and the DNFSB Recommendation 94-1. The potential hazards are significant to workers but less likely to impact the public and the environment external to the INEEL. Removal of SNF from the wet storage basins to safer dry storage effectively reduces the risks created by the fuel, although some of the facility related risks will remain until the facility is deactivated. Continued wet storage of SNF decreases the life

Project Description Narratives

expectancy of the wet storage canisters, creating a medium risk to the public. The design and location of current SNF storage facilities mitigates public risk. However, the risk of worker contamination and potential injury rates in the current wet storage facilities will continue and tend to go up the longer corroding fuel canisters are left in wet storage because of the increased difficulty in recovery. Leaving SNF in wet storage indefinitely presents a higher risk to workers due to corrosion of fuel handling equipment and the SNF itself. This results in degradation of water quality and increase in potential radiological hazards to workers. This activity is bounded by the severity of the effects of an inadvertent criticality in the CPP-603 spent fuel storage facility. This maximum reasonably foreseeable accident is documented in the ER&WM EIS (DOE/EIS - 0203-F, Vol.2, Part A, p. 5.14-13). The frequency for this event is 1.0 E-03 events per year. Facility worker dose is 9.7 E-02 rem. The MEI dose is 1.0 E-3 rem and the risk of fatal cancer per year is 5.0 E-10. During the movement of fuel, the potential for increased radiation exposure that could occur from handling SNF of unknown condition increases due to possible failure of fuel baskets, cans, containers, etc. These failures could lead to a criticality with personnel near the water storage basins under a worst case scenario. Once the SNF is moved out of wet storage the risk to workers will drop significantly.
A worst case scenario criticality could lead to a release of fission products and gases to the atmosphere. A release to the environment could potentially contaminate areas off the INEEL. Once the fuel is moved to dry storage, the risk of criticality is reduced, thereby reducing the potential for contamination of the environment. Additionally, although design and location mitigates health and safety effects on the public if a short duration shutdown or inadvertent criticality occurs, a long term shutdown, with the possibility of water evaporating from the pools, overheating and burst fuel elements, and further degradation of these already old facilities increases the likelihood of airborne and soil contamination.

Dry Storage - existing dry storage facilities are not adequate due to capacity to accommodate the consolidation of the on-site spent nuclear fuels and projected INEEL assigned SNF receipts. Also the risk of proliferation is high if assigned Foreign Research Reactor (FRR) fuels are not received into the United States.

The Settlement Agreement between DOE, the State of Idaho, and the Navy requires removal of SNF from wet storage to mitigate the associated hazards. The end result will be that the SNF is prepared for shipment out of Idaho in accordance with the Settlement Agreement.

Safety & Health Work Performance:

The resources necessary to accomplish the work safely are provided through the Authorization Basis, the site Health and Safety Program requirements, and through the resources allocated to the site`s Integrated Safety Management System (ISMS) in the following functional categories: radiological safety, criticality safety, emergency management, fire safety, industrial hygiene, nuclear safety, occupational medicine, occupational safety, safeguards and security, safety integration, performance oversight, and standards management. S&H resources are planned and allocated into these categories by cost centers through the work breakdown structure and resource loaded into the project for each fiscal year. The S&H resources necessary to accomplish the Emptied of SNF Project functions include:

(1) Fire protection personnel to perform monthly fire system checks;

(2) One safety point-of-contact (POC) calls upon various safety personnel (from many S&H areas) to perform monthly safety reviews of emergency safety procedures, and constant reviews of operating procedures (averaging one per week). The POC routes procedures to the appropriate personnel depending on the hazards involved.

(3) Industrial hygiene personnel perform monthly industrial hygiene surveys.

(4) Radiological control technicians (RCTs)conduct regular (some daily and some weekly, depending on the area and equipment involved) radiological monitoring. RCTs are assigned to work areas. RCTs are required to be present to monitor worker exposure during work that involves a radiological hazard.

(5) Nuclear Fuel Safety and Nuclear Criticality Safety Engineers perform unresolved safety questions (USQ) reviews and review all procedures and start-up documentation and update Safety Analysis Reports as new SNF transfers or storage configuration changes are planned. Nuclear Fuel Safety,

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Criticality Safety, and other S&H resources participate fully in Readiness Assessments, Management Self Assessments, and Operational Readiness Reviews.

All personnel are trained in the use of "stop work" procedures, evacuation procedures, and other safety procedures appropriate to their job function and work area.

No appreciable change in S&H resource requirements is anticipated for the eight projects until each facility is turned over to the Deactivation Program. There are no unfunded or underfunded S&H resource requirements in this PBS.

PBS Comments:

This project is highly visible with the Idaho and Colorado State Governments. Schedules for removing fuel from the State of Idaho have been delineated in the DOE, Navy, Idaho State Settlement Agreement. Missing key milestones (such as failure to empty CPP-603 basins by the end of CY 2000) could lead to legal action, fines, and much adverse publicity. Several of the sub-project areas of this PBS have been subject to demands for significantly increased scope by DOE since original budget estimates were prepared in FY 1996. Budget estimates in this PBS reflect the increased scope.

Baseline Validation Narrative:

In the fall of 1998, the INEEL initiated a formal cost estimating process to be used in the development of the updated lifecycle planning for the EM Program. Lifecycle planning packages (LCPPs) have been developed for each of the projects within this PBS using this formal process. Cost estimates have been prepared for each of the activities involved using parametric data, actual cost comparisons and subject matter experts. The cost estimates have been adjusted for complexity, mitigating factors and other influences. Validation and signoff by DOE-ID of these LCPPs has occurred for all projects except for a portion of the TAN project, the CPP-1774 project, and the DTF/DSF project which will be completed later this year. PBS and project specific assumptions have been identified within the LCPPs that formed the basis for each of the estimates prepared. The prior validated baseline was created as a result of the 1996 independent validation review by the Murder Boards of six (6) of the projects of this PBS (two had not been conceived at the time). The six projects that were subject to Murder Board Review were: CPP-603, CPP-666, Dry Storage (now split into CPP-749 and IFSF), Ft. St. Vrain, and TAN. Murder Boards were formed by LMITCO and DOE-ID personnel from outside the individual projects. The Murder Board reviewed and validated project scope of work, schedule, cost estimate, and technical approach. Assumptions used during the Murder Boards have changed significantly in the current LCPP process. These changes are reflected in the current estimates. Additionally, two new projects have been added to this PBS, CPP-1774 Dry Storage Facility Emptied of SNF, and DTF/DSF Emptied of SNF. Current budgets and schedules reflect this vastly increased work scope.

General PBS Information

Project Validated?	Yes	**Date Validated:**	3/31/1999
Has Headquarters reviewed and approved project?	No		
Date Project was Added:	12/1/1997		
Baseline Submission Date:			

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General PBS Information

FEDPLAN Project? Yes

Drivers:

CERCLA	RCRA	DNFSB	AEA	UMTRCA	State	DOE Orders	Other
N	N	Y	Y	N	Y	Y	Y

Project Identification Information

DOE Project Manager: R.O. Ramsey

DOE Project Manager Phone Number: 208-526-1545

DOE Project Manager Fax Number: 208-526-7245

DOE Project Manager e-mail address: ramseyro@id.doe.gov

Is this a High Visibility Project (Y/N): Y

Planning Section

Baseline Costs (in thousands of dollars)

	1997-2006 Total	2007-2070 Total	1997-2070 Total	1997	Actual 1997	1998	Actual 1998	1999	2000	2001	2002	2003	2004	2005	2006
PBS Baseline (current year dollars)	418,476	1,680,224	2,098,700	30,647	30,093	29,275	24,451	37,920	42,071	44,991	42,050	42,783	48,423	49,962	50,354
PBS Baseline (constant 1999 dollars)	385,071	974,757	1,359,828	30,647	30,093	29,275	24,451	37,920	41,045	43,894	38,521	38,236	42,139	42,008	41,386
PBS EM Baseline (current year dollars)	418,476	1,680,224	2,098,700	30,647	30,093	29,275	24,451	37,920	42,071	44,991	42,050	42,783	48,423	49,962	50,354
PBS EM Baseline (constant 1999 dollars)	385,071	974,757	1,359,828	30,647	30,093	29,275	24,451	37,920	41,045	43,894	38,521	38,236	42,139	42,008	41,386

	2007	2008	2009	2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
PBS Baseline (current	48,574	156,420	157,163	68,555	259,330	210,738	252,098	301,829	225,517	0	0	0	0	0	0	0

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	2007	2008	2009	2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
year dollars)																
PBS Baseline (constant 1999 dollars)	38,873	121,535	119,018	49,871	171,813	125,639	128,676	135,347	83,985	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	48,574	156,420	157,163	68,555	259,330	210,738	252,098	301,829	225,517	0	0	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	38,873	121,535	119,018	49,871	171,813	125,639	128,676	135,347	83,985	0	0	0	0	0	0	0

Baseline Escalation Rates

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
0.00%	0.00%	0.00%	2.50%	0.00%	6.50%	2.50%	2.70%	3.50%	2.30%	2.70%	3.00%	2.60%

2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
4.10%	3.20%	1.40%	4.40%	1.40%	5.50%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%

Project Reconciliation

Project Completion Date Changes:

Previously Projected End Date of Project:

Current Projected End Date of Project: 9/30/2035

Explanation of Project Completion Date Difference (if applicable):

All SNF must be removed from the State of Idaho by 01/01/2035 to comply with the State Settlement Agreement. The projected completion date stated above includes the time required to transition the last of the SNF facilities over to the Deactivation Program.

Project Cost Estimates (in thousands of dollars)

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Project Reconciliation

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars):	695,798	**Actual 1997 Cost:**	30,093	**Actual 1998 Cost:**	24,451
Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars):	641,254	**Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):**			17,314
Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	658,568				

Project Cost Changes

	Cost Adjustments	Reconciliation Narratives
Cost Change Due to Scope Deletions (-):	120,600	Cancelled wetload project, moved up closure of Fort St. Vrain by 7 years, reduced Navy SNF shipments
Cost Reductions Due to Efficiencies (-):		
Cost Associated with New Scope (+):	669,347	LICP and NRC licensing for SNF removal to repository, GPPs for facilities, FRR/DRR receipts
Cost Growth Associated with Scope Previously Reported (+):	92,590	Contingency calculated based upon formal analysis, and increased cost of NRC-related activities.
Cost Reductions Due to Science & Technology Efficiencies (-):		
Subtotal:	1,299,905	
Additional Amount to Reconcile (+):	1	
Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	**1,299,906**	

Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
Begin transfers of SNF from CPP-666 to new DOE dry storage facili	ID-SNF-103-M11		7/1/2003	7/1/2003							
Commence loading TMI SNF into dry storage (E078)	ID-SNF-103-M30		3/31/1999	3/31/1999			Y				
Complete preparations to transfer the TMI SNF from TAN to Dry Sto	ID-SNF-103-M29		3/30/1999	3/30/1999							Y
Complete removal of SNF from wet storage (E119)	ID-SNF-103-M13		9/30/2011	12/31/2023			Y				
Complete removal of all SNF from Ft. St. Vrain ISFSI (Colorado)	ID-SNF-103-M33		9/30/2027	1/1/2035			Y				
Complete removal of all SNF from underwater storage	ID-SNF-103-M1		8/9/2000	12/31/2000			Y				

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Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
at CPP-603											
Complete transfer of TMI SNF from TAN to the Dry Storage Facility	ID-SNF-103-M31		6/1/2001	6/1/2001			Y				
Complete transfers of Unirradiated Shippingport LWBR from CPP-749	ID-SNF-103-M20		9/30/2008								Y
Remove all SNF from storage at the INEEL (E054)	ID-SNF-103-M32		12/22/2034	1/1/2035			Y				Y
Commence loading TMI fuel in dry storage.			3/1/1999	3/31/1999					Y		
Transfer 67 units of SNF from INTEC-603 Basin Storage.			9/30/1999	12/31/2000					Y		
Complete transfer of 18 PB Canisters			9/1/1999						Y		
Complete Receipt of FRR Reactor Fuel			5/13/2009	5/13/2009							
Complete removal of SNF from IFSF			9/30/2034								
Complete removal of SNF from CPP-749			9/30/2011								
Complete removal of DOE-owned SNF from CPP-666			12/31/2011	12/31/2023			Y				
Complete removal of all SNF from TAN			9/30/2018								
Complete removal of SNF from CPP-1774			9/30/2034	1/1/2035			Y				
Complete removal of all SNF from DTF/DSF			12/22/2034	1/1/2035			Y				
Project end			9/30/2035								
Project Start			10/1/1996								

Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critial Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
Begin transfers of SNF from CPP-666 to new DOE dry storage facili	ID-SNF-103-M11									Y	The wet load project that this milestone was a part of has been

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Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critial Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
											cancelled.
Commence loading TMI SNF into dry storage (E078)	ID-SNF-103-M30										First load of TMI SNF was loaded into dry storage on 3/31/99 meeting the State Settlement Agreement milestone date.
Complete preparations to transfer the TMI SNF from TAN to Dry Sto	ID-SNF-103-M29									Y	
Complete removal of SNF from wet storage (E119)	ID-SNF-103-M13										
Complete removal of all SNF from Ft. St. Vrain ISFSI (Colorado)	ID-SNF-103-M33										
Complete removal of all SNF from underwater storage at CPP-603	ID-SNF-103-M1						3	4	2		
Complete transfer of TMI SNF from TAN to the Dry Storage Facility	ID-SNF-103-M31						4	5	2		
Complete transfers of Unirradiated Shippingport LWBR from CPP-749	ID-SNF-103-M20									Y	
Remove all SNF from storage at the INEEL (E054)	ID-SNF-103-M32	Y				Y	5	5	5		
Commence loading TMI fuel in dry storage.										Y	This is a duplicate of #1130 with the wrong date.
Transfer 67 units of SNF from INTEC-603 Basin Storage.										Y	LMITCO company milestone. Same workscope as in milestone 1134.
Complete transfer of 18 PB Canisters							1	3	1	Y	Complete transfer of 18 Peach Bottom Canisters from 1st generation to 2nd generation storage vaults in INTEC-749.

Project Baseline Summary Report

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Operations/Field Office: **Idaho** Print Date: **3/10/2000**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory** HQ ID: **0177**

Project **ID-SNF-103 / Emptied SNF Facilities**

Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critial Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
											Internal milestone only.
Complete Receipt of FRR Reactor Fuel										Y	There is no formal completion date for receipt of foreign research reactor SNF to the INEEL. Based on current planning only, the last shipment is expected to be received in FY-2009.
Complete removal of SNF from IFSF							3	4	3		Complete removal of all SNF from IFSF and transition facility to the Deactivation Program.
Complete removal of SNF from CPP-749											Complete the removal of all SNF and SNM from CPP-749 and transition the facility over to the Deactivation Program.
Complete removal of DOE-owned SNF from CPP-666											Complete removal of all DOE-owned SNF from CPP-666 and transition facility over to Deactivation. The Naval SNF will have been removed from the facility by this time as well.
Complete removal of all SNF from TAN											Complete the removal of all dry stored West Valley and Long Term Storage and Maintenance (LTSM) SNF from TAN and turn the TAN-607 Hot Shop and related facilities over to the Deactivation Program.
Complete removal of SNF from CPP-1774											Complete the removal of all SNF stored at CPP-1774 and transition the facility over to the Deactivation Program.
Complete removal of all SNF from DTF/DSF											Complete removal of all SNF from the DTF and the DSF and load for tranportation to the repository. The removal of the SNF must be

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											completed by January 1, 2035 to meet the State Settlement Agreement milestone. Transition of the DTF/DSF will complete in F
Project end					Y		3	3	2		Complete closure of all activities associated with the SNF Program, turnover of facilities to Deactivation Program, and placement of all records into archives. Closure of all outstanding fund sources.
Project Start				Y							PBS Baseline Start

Performance Measure Metrics

Category/Subcategory	Units	1997-2006 Total	2007-2070 Total	1997-2070 Total	Actual Pre-1997	Planned 1997	Actual 1997	Planned 1998	Planned 1999	Planned 2000	Planned 2001	Planned 2002	Planned 2003	Planne 200
SNF														
Moved to Dry Storage	MTHM	90.40	2.50	92.90	0.00		0.00	0.10	4.90	51.20	29.80	4.20	0.00	0.(
SNF														
Shipped for Consolidation	MTHM	0.00	3.60	3.60	0.00		0.00	0.00						

Category/Subcategory	Units	Planned 2004	Planned 2005	Planned 2006	Planned 2007	Planned 2008	Planned 2009	Planned 2010	Planned 2011 - 2015	Planned 2016 - 2020	Planned 2021 - 2025	Planned 2026 - 2030	Planned 2031 - 2035
SNF													
Moved to Dry Storage	MTHM	0.00	0.10	0.10	1.10	1.10	0.10	0.10	0.10				
SNF													
Shipped for Consolidation	MTHM			0.00	0.00	0.00	0.00	0.00	1.80	1.80			

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Category/Subcategory	Units	Planned 2036 - 2040	Planned 2041 - 2045	Planned 2046 - 2050	Planned 2051 - 2055	Planned 2056 - 2060	Planned 2061 - 2035	Planned 2066 - 2070	Exceptions	Lifecycle Total
SNF										
Moved to Dry Storage	MTHM									88.24
SNF										
Shipped for Consolidation	MTHM									3.70